

# CPE EMERGING TECHNOLOGIES (LEM)

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## **LEM 8000 - Exploring Emerging Technologies (1 Credit)**

*1 lecture, 0 lab, 1 total contact hours*

Explores how to be part of new technologies that will shape how we live and work. Provides an understanding of artificial intelligence, machine learning, cybersecurity, cloud computing, big data, internet of things (IoT), augmented reality, virtual reality, blockchain, digital privacy, and more. Designed to help students discover their tech path, from a basic understanding of emerging technology or to pursue a career or advanced training in this field.

**Typically offered:** Fall, Spring, Summer

## **LEM 8001 - Foundations of Artificial Intelligence (0.5 Credits)**

*.5 lecture, 0 lab, 0 clinical/other, .5 total contact hours*

Artificial Intelligence is rapidly evolving with numerous applications across many industries. In this interactive course, students will learn about the AI Project Cycle and building AI solutions. Students will also gain knowledge of machine learning tools and Python packages. This course is designed to prepare students for AI for business solutions and other emerging technologies.

**Typically offered:** Fall, Spring

## **LEM 8002 - Artificial Intelligence I (1 Credit)**

*1 lecture, 0 lab, 1 total contact hours*

Explores how Artificial Intelligence (AI) continues to evolve rapidly with numerous applications across many industries. Learns how the AI Project Cycle is an iterative approach to building AI solutions in this interactive course. Gains knowledge of machine learning tools and python packages. Prepares students for AI for business solutions and other emerging applications and technology. Prerequisite: CE Introduction to Artificial Intelligence or equivalent experience.

**Typically offered:** Fall, Spring, Summer

## **LEM 8004 - Artificial Intelligence Foundations II (1 Credit)**

*.5 lecture, 1 lab, 1.5 total contact hours*

Explores common trade applications of Artificial Intelligence, including novice, intermediate, and advanced levels. Utilizes linear regression for predictive maintenance and employee attrition predictions. Learns how to detect insurance fraud and analyze quality assurance systems. Prerequisite: LEM8002 Artificial Intelligence Foundations or equivalent experience.

**Typically offered:** Fall, Spring, Summer

## **LEM 8006 - Artificial Intelligence: Strategies For Marketing (1 Credit)**

*1 lecture, 1 total contact hours*

This course provides an in-depth understanding of current AI applications in marketing and offers hands-on strategies for leveraging AI in your own campaigns. Participants will utilize data analysis, customer segmentation, predictive analytics, and content personalization to develop practical skills and insights that empower professionals in this rapidly evolving digital world. Participants will also enhance their proficiency in utilizing AI to deliver targeted, data-driven, and innovative marketing strategies.

**Typically offered:** Fall, Spring

## **LEM 8008 - Foundations of Cybersecurity (0.5 Credits)**

*.5 lecture, .5 total contact hours*

Learn the essentials of cybersecurity in a cloud computing environment. This course provides an understanding of cloud at the center of emerging AI technologies among a growing landscape of high-demand software. Topics include an overview of cybersecurity and cloud terminology, systems, and services, as well as the training and career pathways for these growing fields.

**Typically offered:** Fall, Spring